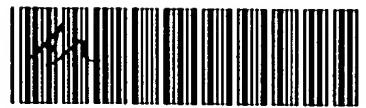


RAW SEQUENCE LISTING

The Biotechnology Systems Branch of the Scientific and Technical Information Center (STIC) no errors detected.

Application Serial Number: 10/549,997
Source: Py/10
Date Processed by STIC: 10/3/05

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PATENT APPLICATION: US/10/549,997

DATE: 10/03/2005

TIME: 14:53:07

Input Set : A:\2107-283.ST25.txt
 Output Set: N:\CRF4\10032005\J549997.raw

3 <110> APPLICANT: Greiner, Steffen
 4 Harms, Karsten
 5 Kunz, Markward
 6 Munir, Mohammad
 7 Rausch, Thomas
 8 Schirmer, Markus
 10 <120> TITLE OF INVENTION: ALTERED PPASE IN SUGAR BEET
 12 <130> FILE REFERENCE: P/2107-283
 C--> 14 <140> CURRENT APPLICATION NUMBER: US/10/549,997
 C--> 15 <141> CURRENT FILING DATE: 2005-09-20
 17 <150> PRIOR APPLICATION NUMBER: DE 103 13 795.5
 18 <151> PRIOR FILING DATE: 2003-03-20
 20 <160> NUMBER OF SEQ ID NOS: 21
 22 <170> SOFTWARE: PatentIn version 3.3
 24 <210> SEQ ID NO: 1
 25 <211> LENGTH: 1041
 26 <212> TYPE: DNA
 27 <213> ORGANISM: Beta vulgaris
 29 <400> SEQUENCE: 1
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 34 ggatgaggag atgaatgctg ttgcggagat gaatgctgtt gcttctaaag taaaagaaga 180
 36 gtatcgccga gctccgaagt tgaacccaaag gatcatttcg tcaatgtcaa ggagatctgt 240
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 69 <212> TYPE: PRT
 70 <213> ORGANISM: Beta vulgaris
 72 <400> SEQUENCE: 2
 74 Met Asp Glu Glu Met Asn Ala Val Ala Glu Met Asn Ala Val Ala Ser

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PATENT APPLICATION: US/10/549,997

DATE: 10/03/2005
TIME: 14:53:07

Input Set : A:\2107-283.ST25.txt
Output Set: N:\CRF4\10032005\J549997.raw

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 78 Lys Val Lys Glu Glu Tyr Arg Arg Ala Pro Lys Leu Asn Gln Arg Ile
 79 20 25 30
 82 Ile Ser Ser Met Ser Arg Arg Ser Val Ala Ala His Pro Trp His Asp
 83 35 40 45
 86 Leu Glu Ile Gly Pro Asn Ala Pro Glu Ile Cys Asn Cys Val Val Glu
 87 50 55 60
 90 Ile Pro Lys Gly Ser Lys Val Lys Tyr Glu Leu Asp Lys Lys Thr Gly
 91 65 70 75 80
 94 Leu Ile Met Val Asp Arg Ile Leu Tyr Ser Ser Val Val Tyr Pro His
 95 85 90 95
 98 Asn Tyr Gly Phe Ile Pro Arg Thr Leu Cys Glu Asp Gly Asp Pro Met
 99 100 105 110
 102 Asp Val Leu Val Leu Met Gln Glu Pro Val Val Pro Gly Arg Phe Leu
 103 115 120 125
 106 Arg Ala Arg Ala Ile Gly Leu Met Pro Met Ile Asp Gln Gly Glu Lys
 107 130 135 140
 110 Asp Asp Lys Ile Ile Ala Val Cys Ala Asp Asp Pro Glu Val Arg His
 111 145 150 155 160
 114 Tyr Thr Asp Ile Asn Gln Leu Pro Pro His Arg Leu Ala Glu Ile Arg
 115 165 170 175
 118 Arg Phe Phe Glu Asp Tyr Lys Lys Asn Glu Asn Lys Glu Val Ala Val
 119 180 185 190
 122 Asn Glu Pro Leu Pro Ala Gln Ile Ala His Asp Ala Ile Gln His Ser
 123 195 200 205
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 133 <213> ORGANISM: Beta vulgaris
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 141 Glu Glu Met Asn Ala Val Ala Glu Met Asn Ala Val Ala Ser Lys Val
 142 20 25 30
 145 Lys Glu Glu Tyr Arg Arg Ala Pro Lys Leu Asn Gln Arg Ile Ile Ser
 146 35 40 45
 149 Ser Met Ser Arg Arg Ser Val Ala Ala His Pro Trp His Asp Leu Glu
 150 50 55 60
 153 Ile Gly Pro Asn Ala Pro Glu Ile Cys Asn Cys Val Val Glu Ile Pro
 154 65 70 75 80
 157 Lys Gly Ser Lys Val Lys Tyr Glu Leu Asp Lys Lys Thr Gly Leu Ile
 158 85 90 95
 161 Met Val Asp Arg Ile Lys Tyr Ser Ser Val Val Tyr Pro His Asn Tyr
 162 100 105 110
 165 Gly Phe Ile Pro Arg Thr Leu Cys Glu Asp Gly Asp Pro Met Asp Val
 166 115 120 125
 169 Leu Val Leu Met Gln Glu Pro Val Val Pro Gly Arg Phe Leu Arg Ala

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DATE: 10/03/2005
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Input Set : A:\2107-283.ST25.txt
Output Set: N:\CRF4\10032005\J549997.raw

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269	tgaaaatggt	tgaggaggtc	cgaaggcaat	tcaacaccat	ccctggcttgc	ctggaggca	1920										
271	ctgccaaacc	cgactatgct	acctgtgtca	agatctccac	tgatgctcc	atcaaggaga	1980										
273	tgatcccccc	aggtgcttctt	gtcatgctca	caccattgtat	tgttggaaacc	ttcttgggt	2040										
275	tcgaaaactct	gtctggcggtt	cttgctgggt	ctcttgttgc	tggtgtacag	attgcttattt	2100										
277	ctgcataccaa	cactgggtt	gcttgggaca	atgccaagaa	gtacatttgag	gctgggtgtt	2160										
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283	agcttatggc	tgtcgagtca	ctagtgttgc	cccccttctt	cgccaccac	ggtggcttgc	2340										
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293	attatttctt	tctttttctt	tccttttattt	gtaagatcg	gatttgtt	aatcattttgc	2640										
295	caaacctctt	ttgttaggta	taactcattt	tctattttag	tccttcagaa	attgcata	2700										
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313	Val	Cys	Ala	Val	Ile	Gly	Ile	Ala	Phe	Ser	Leu	Phe	Gln	Trp	Tyr	Ile	
314					20					25					30		
317	Val	Ser	Gln	Val	Lys	Leu	Ser	Pro	Asp	Ser	Thr	Arg	Asn	Asn	Asn	Asn	
318					35					40					45		
321	Lys	Asn	Gly	Phe	Ser	Asp	Ser	Leu	Ile	Glu	Glu	Glu	Gly	Leu	Asn		
322					50					55					60		
325	Asn	Gln	Ser	Val	Val	Ala	Lys	Cys	Ala	Glu	Ile	Gln	Asn	Ala	Ile	Ser	
326					65					70					75		80
329	Glu	Gly	Ala	Thr	Ser	Phe	Leu	Phe	Thr	Glu	Tyr	Gln	Tyr	Val	Gly	Ile	
330					85					90					95		
333	Phe	Met	Val	Ala	Phe	Ala	Val	Leu	Ile	Phe	Leu	Phe	Leu	Gly	Ser	Val	
334					100					105					110		
337	Gln	Gly	Phe	Ser	Thr	Ser	Ser	Gln	Glu	Cys	Thr	Tyr	Asp	Lys	Thr	Arg	
338					115					120					125		
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342					130					135					140		
345	Leu	Leu	Gly	Ala	Ile	Thr	Ser	Leu	Gly	Ser	Gly	Phe	Phe	Gly	Met	Lys	
346					145					150					155		160
349	Ile	Ala	Thr	Tyr	Ala	Asn	Ala	Arg	Thr	Thr	Leu	Glu	Ala	Arg	Lys	Gly	
350											165				170		175
353	Val	Gly	Lys	Ala	Phe	Ile	Val	Ala	Phe	Arg	Ser	Gly	Ala	Val	Met	Gly	
354											180				185		190
357	Phe	Leu	Leu	Ala	Ala	Asn	Gly	Leu	Leu	Val	Leu	Tyr	Ile	Thr	Ile	Leu	
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PATENT APPLICATION: US/10/549,997

DATE: 10/03/2005
TIME: 14:53:07

Input Set : A:\2107-283.ST25.txt
Output Set: N:\CRF4\10032005\J549997.raw

361 Leu Phe Lys Ile Thr Thr Gly Asp Asp Trp Gln Gly Leu Phe Gln Ala
 362 210 215 220
 365 Ile Thr Gly Tyr Gly Leu Gly Gly Ser Ser Met Ala Leu Phe Gly Arg
 366 225 230 235 240
 369 Val Ala Gly Gly Ile Tyr Thr Lys Ala Ala Asp Val Gly Ala Asp Leu
 370 245 250 255
 373 Val Gly Lys Val Glu Arg Asp Ile Pro Glu Asp Asp Pro Arg Asn Pro
 374 260 265 270
 377 Ala Val Ile Ala Asp Asn Val Gly Asp Asn Val Gly Asp Ile Ala Gly
 378 275 280 285
 381 Met Gly Ser Asp Leu Phe Gly Ser Tyr Ala Glu Ser Ser Cys Ala Ala
 382 290 295 300
 385 Leu Val Val Ala Ser Ile Ser Ser Phe Glu Ile Ser His Asp Leu Thr
 386 305 310 315 320
 389 Ala Met Met Tyr Pro Leu Leu Val Ser Ser Val Gly Ile Ile Val Cys
 390 325 330 335
 393 Leu Ile Thr Thr Leu Phe Ala Thr Asp Phe Phe Glu Ile Lys Ala Val
 394 340 345 350
 397 Lys Glu Ile Glu Pro Ala Leu Lys Lys Gln Leu Ile Ile Ser Thr Ala
 398 355 360 365
 401 Leu Met Thr Val Gly Val Ala Val Ile Ser Trp Ile Ala Leu Pro Thr
 402 370 375 380
 405 Ser Phe Thr Ile Phe Asp Phe Gly Ser Gln Lys Glu Val Gln Asn Trp
 406 385 390 395 400
 409 Gln Leu Phe Leu Cys Val Ala Val Gly Leu Trp Ala Gly Leu Ile Ile
 410 405 410 415
 413 Gly Phe Val Thr Gln Tyr Tyr Thr Ser Asn Ala Tyr Ser Pro Val Gln
 414 420 425 430
 417 Asp Val Ala Asp Ser Cys Arg Thr Gly Ala Ala Thr Asn Val Ile Phe
 418 435 440 445
 421 Gly Leu Ala Leu Gly Tyr Lys Ser Val Ile Ile Pro Ile Phe Ala Ile
 422 450 455 460
 425 Ala Ile Ser Ile Phe Val Ser Phe Ser Phe Ala Ala Met Tyr Gly Ile
 426 465 470 475 480
 429 Ala Met Ala Ala Leu Gly Met Leu Ser Thr Ile Ala Thr Gly Leu Ala
 430 485 490 495
 433 Ile Asp Ala Tyr Gly Pro Ile Ser Asp Asn Ala Gly Gly Ile Ala Glu
 434 500 505 510
 437 Met Ala Gly Met Ser His Arg Ile Arg Glu Arg Thr Asp Ala Leu Asp
 438 515 520 525
 441 Ala Ala Gly Asn Thr Thr Ala Ala Ile Gly Lys Gly Phe Ala Ile Gly
 442 530 535 540
 445 Ser Ala Ala Leu Val Ser Leu Ala Leu Phe Gly Ala Phe Val Ser Arg
 446 545 550 555 560
 449 Ala Ser Ile Gln Thr Val Asp Val Leu Thr Pro Lys Val Phe Ile Gly
 450 565 570 575
 453 Leu Ile Val Gly Ala Met Leu Pro Tyr Trp Phe Ser Ala Met Thr Met
 454 580 585 590
 457 Lys Ser Val Gly Ser Ala Ala Leu Lys Met Val Glu Glu Val Arg Arg

VERIFICATION SUMMARY

PATENT APPLICATION: US/10/549,997

DATE: 10/03/2005

TIME: 14:53:08

Input Set : A:\2107-283.ST25.txt

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L:14 M:270 C: Current Application Number differs, Replaced Current Application Number

L:15 M:271 C: Current Filing Date differs, Replaced Current Filing Date